

Work Order ID 157360

Tuesday, February 21, 2017 1:00:50 PM

157360

Page 2

Item ID: 647.3902

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lower Deflector Assembly, High

Start Date: 3/3/2017 Start Qty: 3.00

3

Cust Item ID:

Required Date: 3/8/2017 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: _____	0.00							
140									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER IAW MPP-120***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.05							
Quality Control									

See w/o 162159

Picklist Print

Tuesday, February 21, 2017 1:00:54 PM

Page 1

Work Order ID: 157360

157360

Parent Item: 647.3902

647 3902

Parent Item Name: Lower Deflector Assembly, High

Start Date: 3/3/2017

Required Date: 3/8/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 13.09.03 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.3912		Manufactured	No			110	Each	3.0000	1	3			
----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

647 3912

Breakaway Tip Wirestrike for Wire Strike Kit

Location

Loc Qty

Loc Code

CCK077

3

127896

3

647.3914		Manufactured	No			110	Each	4.0000	1	3			
----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

647 3914

Breakaway Tip, Long

Location

Loc Qty

Loc Code

CCK002

4

147490

4

MS20470AD6-12		Purchased	No			110	Each	395.0000	3	9			
---------------	--	-----------	----	--	--	-----	------	----------	---	---	--	--	--

MS20470AD6-12

Rivet

Location

Loc Qty

Loc Code

CCK003

381

m136643

381

ST308

14

m127304

14

MAR 1 1 2017
DAS
6
9-89

DAS
36
9-89
158883 (2x)

MAR 1 1 2017
DAS
6
9-89

MAR 1 4 2017
DAS
6
9-89



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO. 04948

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY: M. ANDECK

DATE: 05/04/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

[Signature]

MFG

[Signature]

QC

[Signature]

EFF:

CURRENT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED TOLERANCE AND NOTES

ECR:

D-15-01

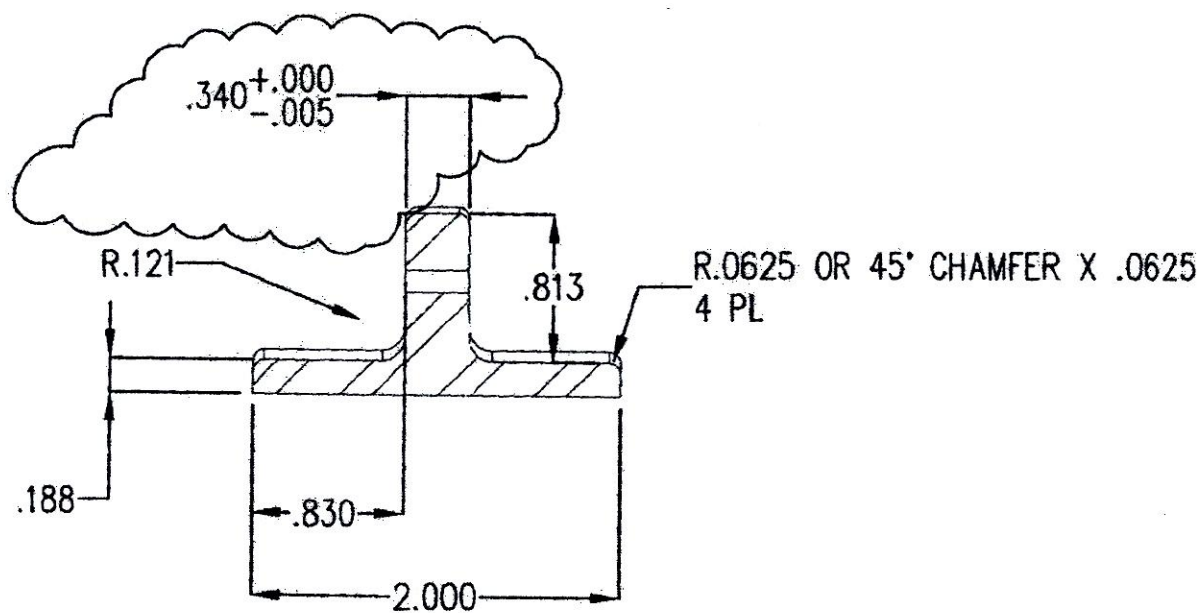
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 157360 *MCJ*
1703-08

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.
- 10 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

SHEET 1, ZONE B1 IS:

11	R	647.3917	2			DOUBLER		
F/N TC	PART NUMBER	.3903	.3902	.3901		DESCRIPTION	MATERIAL	SPECIFICATION
			QTY					
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO



SECTION AT-AT

SHEET 11, ZONE C1 IS:

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

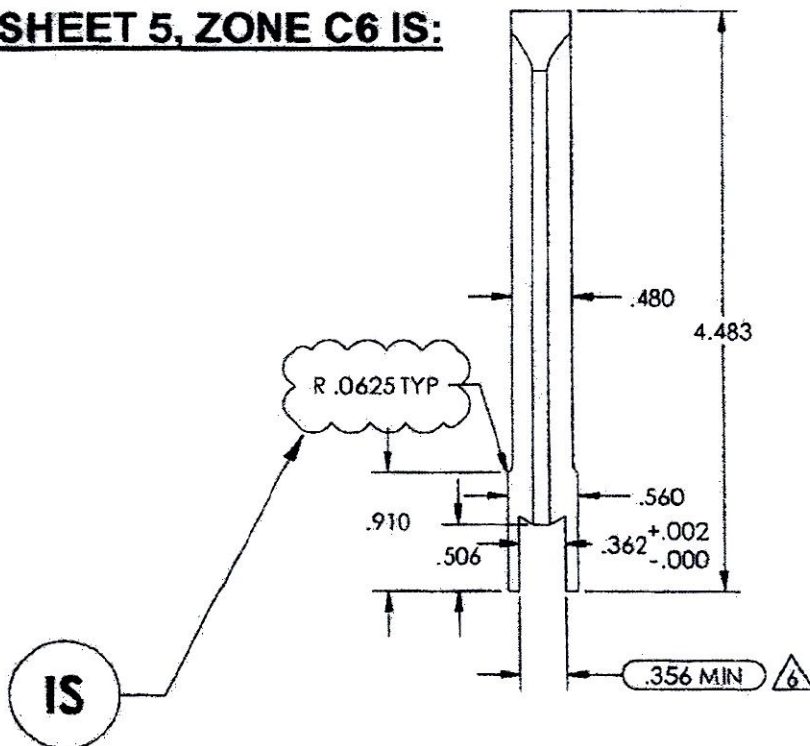
TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

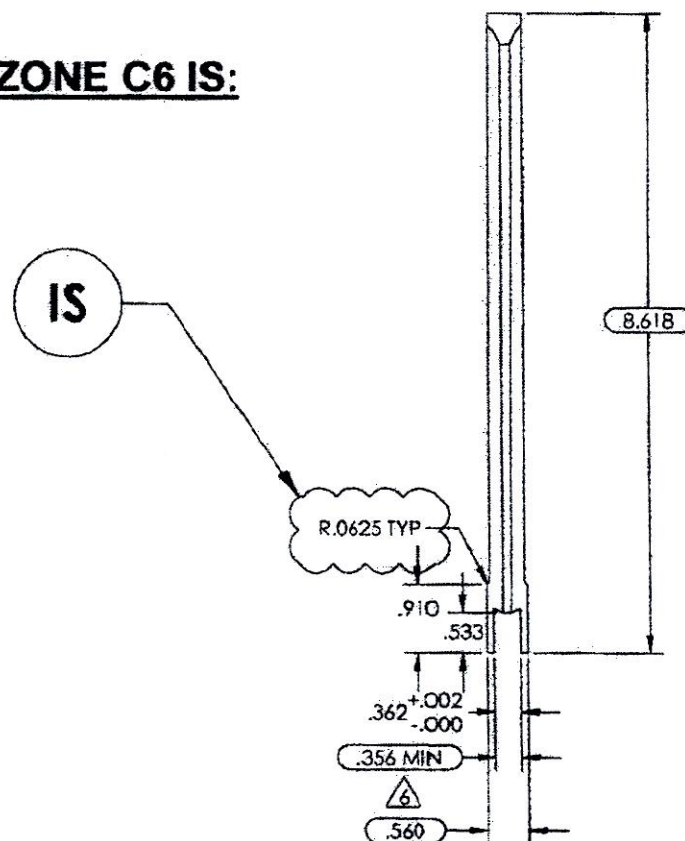
ECR:

D-14-04

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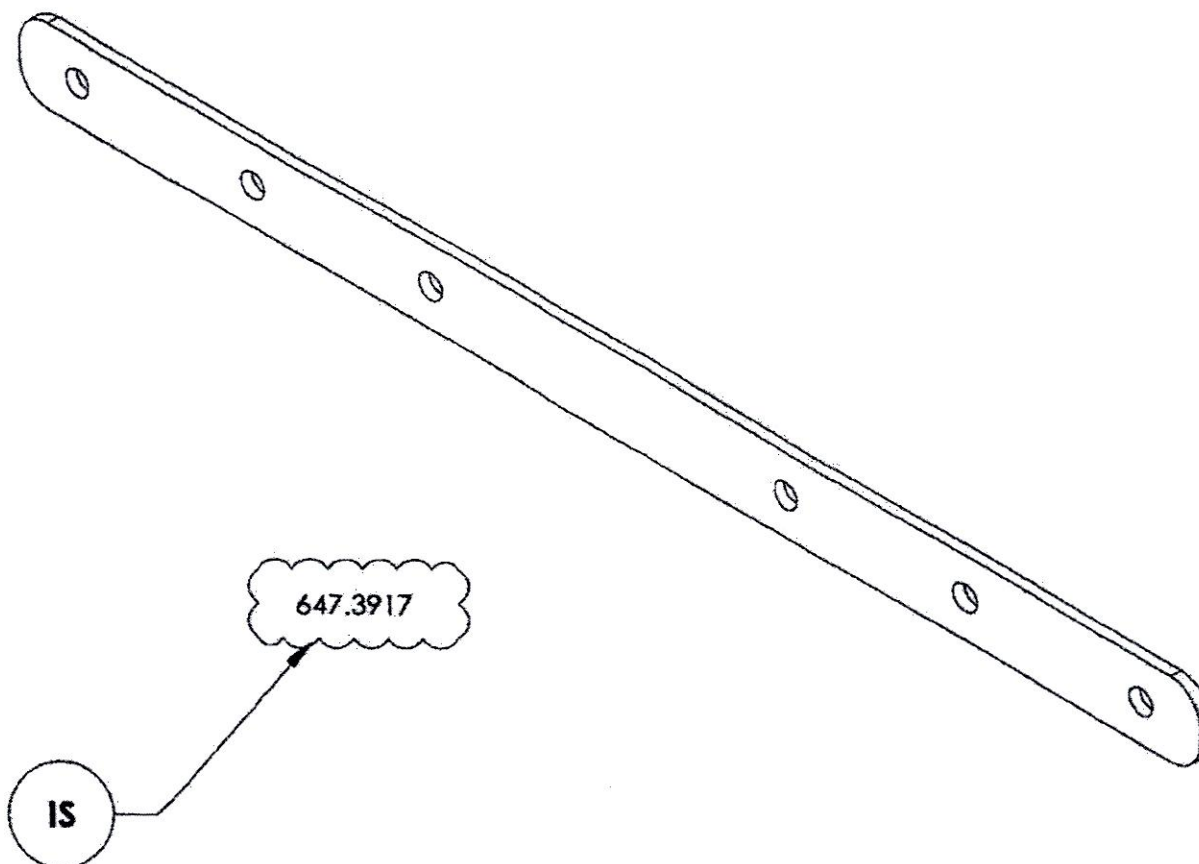


SHEET 6, ZONE C6 IS:



SHEET 1, BOM IS:

11	R	647.3917	2			DOUBLER		
F/N	TC	PART NUMBER	QTY			DESCRIPTION	MATERIAL	SPECIFICATION
		3903	3902	3901				
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED
☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO

SHEET 12, ZONE B5 IS:

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377 J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377 J, TYPE I, CLASS N; 1-2 MIL MAX.

REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE RELEASE: PR1		N/C
N/C	INITIAL RELEASE	09/10/09	F. BRAVO
A	INCORPORATED ECN 00864, 03537 & 03595	07/24/12	F. BRAVO
B	INCORPORATED ECN 04025	08/02/13	F. BRAVO
C	INCORPORATED ECN 04008, 04081 & 04230	11/18/13	F. BRAVO

647.3901

647.3902

UNINCORPORATED ECN(S)

04556, 04948,

6			12	601.3072	RIVET	CR3213-6-9	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1		8	647.3914	BREAKAWAY TIP LONG	△	△△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△△
			5	647.3911	212 UPPER DEFLECTOR	△	△△
			4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598		△
	3	2	2	601.3074	RIVET	MS20470AD 6-12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY HIGH		
		X		647.3901	LOWER DEFLECTOR ASSY LOW		
.3903	.3902	.3901	FIN #	PART #	DESCRIPTION	MAT'L	SPEC
QTY							
NEXT ASSY (S)					PARTS LIST		
647.3800					APICAL INDUSTRIES		
					2608 TEMPLE HEIGHTS DR.		
					OCEANSIDE, CA. 92056-3512 (760)724-5300		
					DEFLECTORS		
					SHEET	CAGE CODE	ENG. NO.
					B	07M26	647.3900
					SCALE	NONE	SHEET 1 OF 12

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

.045

.603

.923

R.915

2.110±.002

4.220±.002

DETAIL A

R.279

R3.406

15.896

15.304

15.046

B

B

Ø.189

6.446

40.2°

.312

0

18.502
18.127

35.8°

10.702
8.599

6.253
1.700

.777
0

.700

.340^{+.000}
-.002

△.346 MAX

DETAIL C

.035 X 45.0° TYP

.375

15.896

C

647.3911

ORIGINAL DATE 10/05/04	ON-CDR		
DRAWN BY D. SCHUB	D. BARNER		
DRAWING APPROVAL P. BRADY	20.00.00		
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°			
SIZE B	CAGE CODE 07M26	DWG NO. 647.3900	REV. C
SCALE NONE		SHEET	2 OF 12

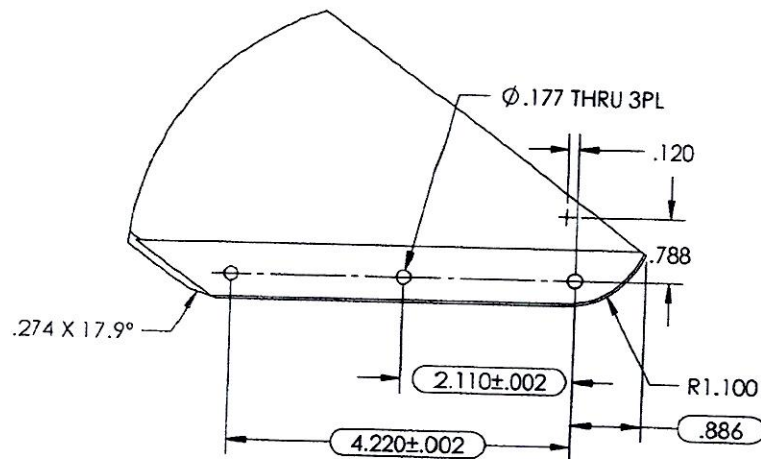
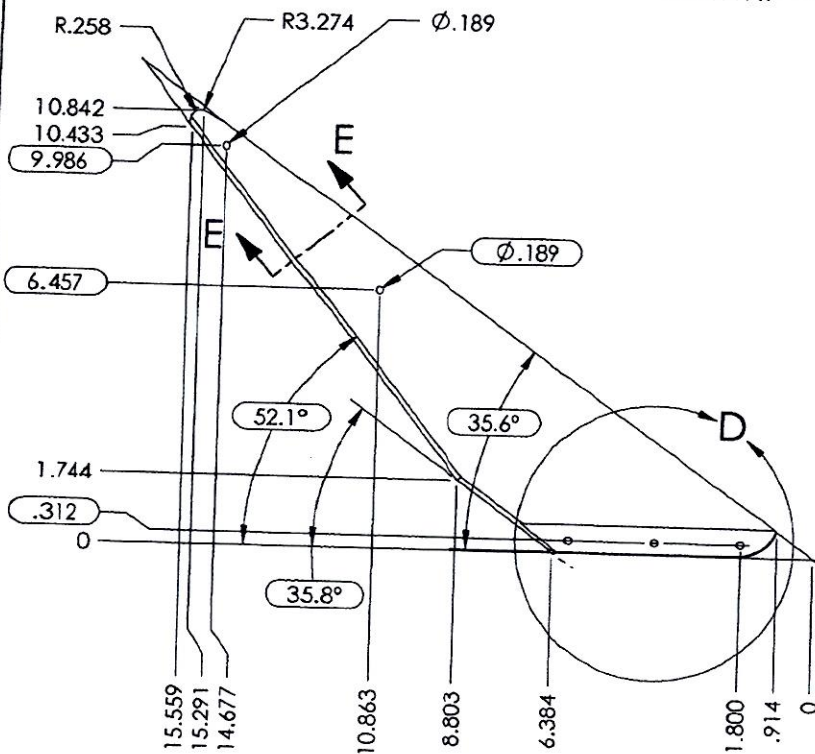
APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

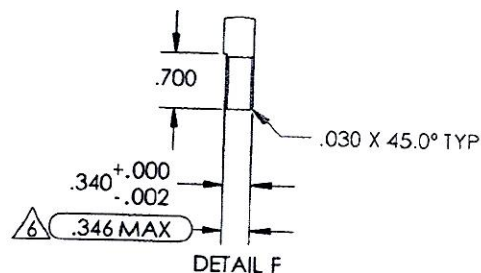
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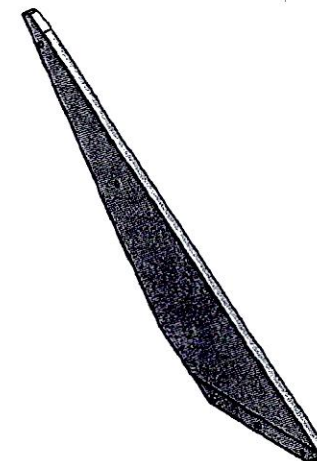
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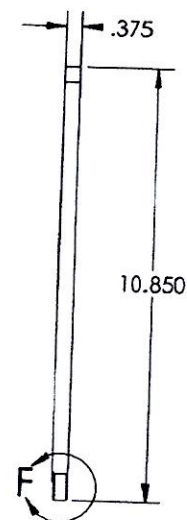
DETAIL D



DETAIL F

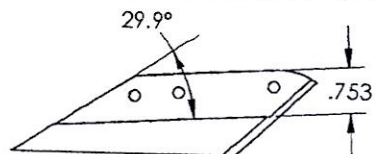


647.3910

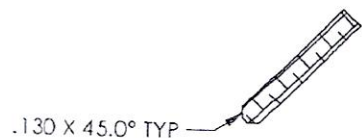


ORIGINAL DATE: 09-10-09		APICAL INDUSTRIES	
DRAWN BY: DUCUR	CHECKED: DUCUR	2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL: P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT No.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 1 PLACE DECIMALS $\pm$.01, 2 PLACE DECIMALS $\pm$.005, 3 PLACE DECIMALS $\pm$.001.		SER: CACA CODE: B	DWG. NO: 647.3900
		SCALE: NONE	REV: C
		SHEET 3 OF 12	

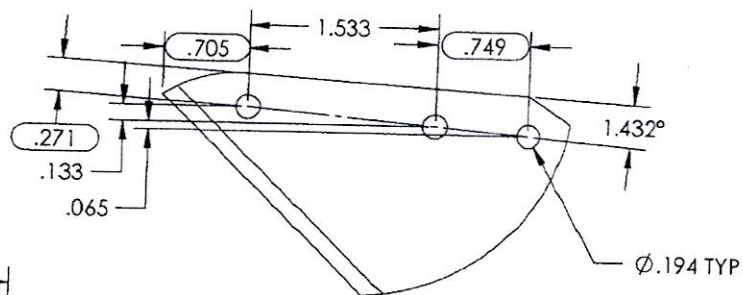
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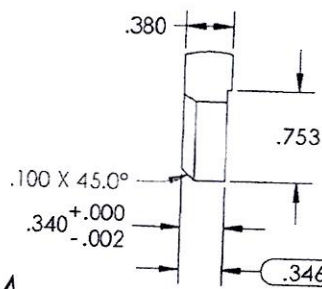
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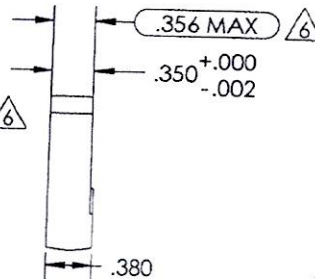
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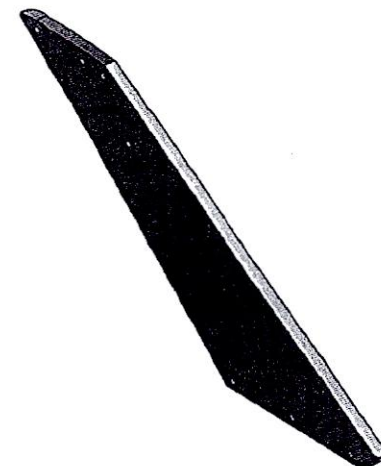
DETAIL H



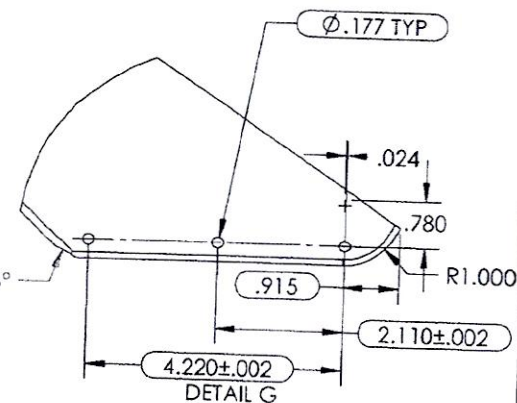
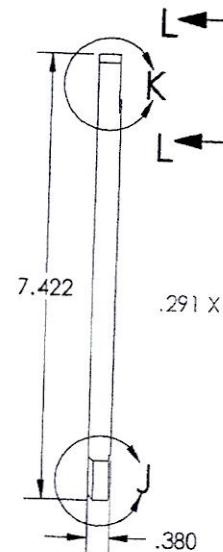
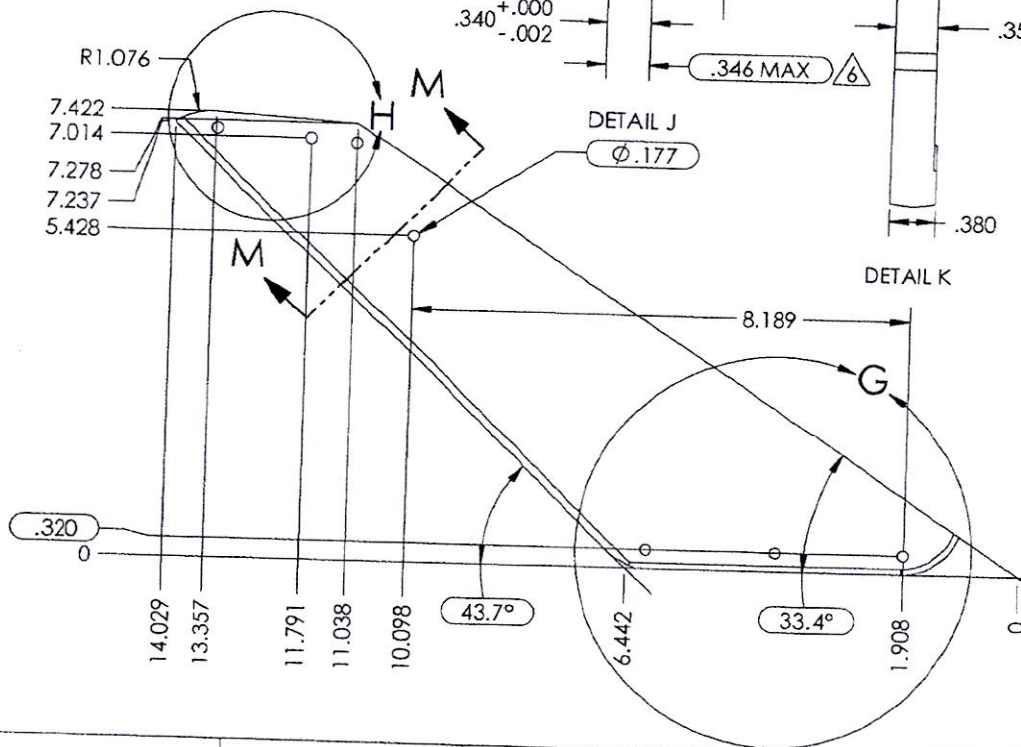
DETAIL J



DETAIL K



647.3912

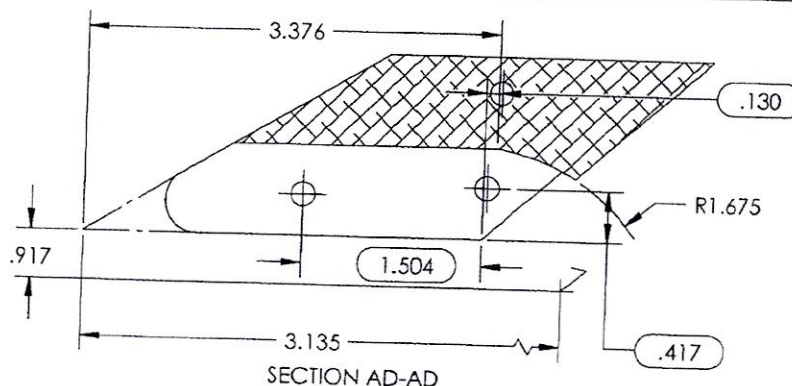


ORIGINAL DATE AUG 1981	DESIGNED BY D. SCHUPP	CHECKED BY D. BARKER	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. BRAVO				
CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°			DEFLECTORS	
SHEET	CAGE CODE 647M16	DWG NO. 647.3900	REV. C	
SCALE NONE			SHEET 4 OF 12	

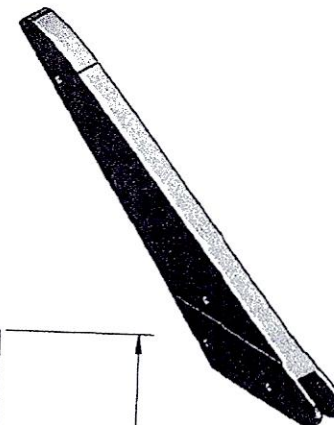
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.180 X 45.0° TYP

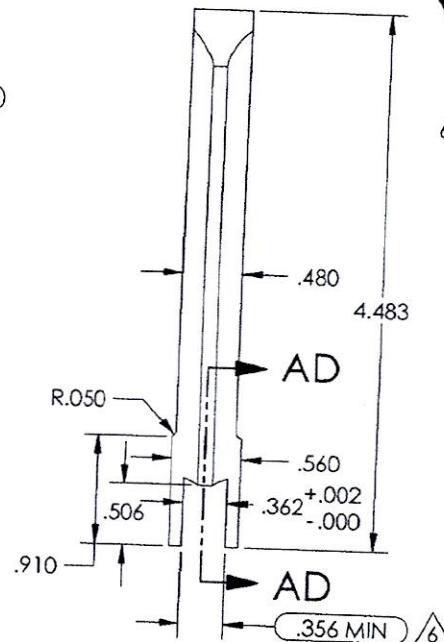
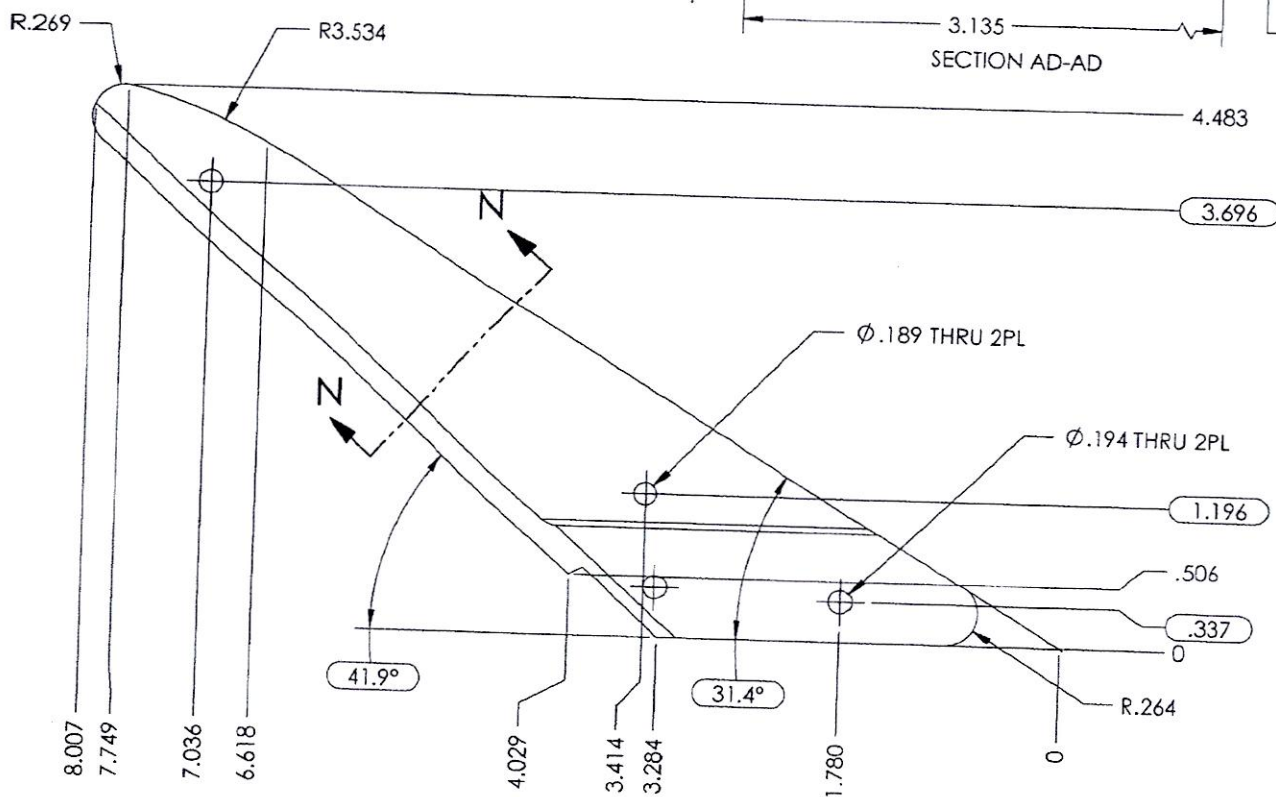
SECTION N-N



SECTION AD-AD



647.3913



ORIGINAL DATE ENCLOSURE 10-10-00		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY D. SCHUR	DESIGNED BY D. SCHUR	DEFLECTORS	
DRAWING APPROVAL P. BRADY		SEE CAGE CODE B 07MZ6	DWG NO. 647.3900
CONTRACT NO.		SCALE NONE	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SHEET 5 OF 12	

.175 X 45.0° TYP

SECTION AB-AB

647.3914

ORIGINAL DATE JAN-19-1992 09:10:08		APICAL INDUSTRIES	
DRAWN BY D. SCHUBER		2608 TEMPLE HEIGHTS DR.	
CHECKED BY B. BARNER		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL E. BARNER			
DATE 01-20-92			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS ± .005 3 PLACES DECIMALS ± .001 ANGLES ± .5°			
SIZE	CAGE CODE	DWG. NO.	REV. C
	B 07AM26	647.3900	
SCALE NONE		SHEET 4 OF 12	

APICAL INDUSTRIES

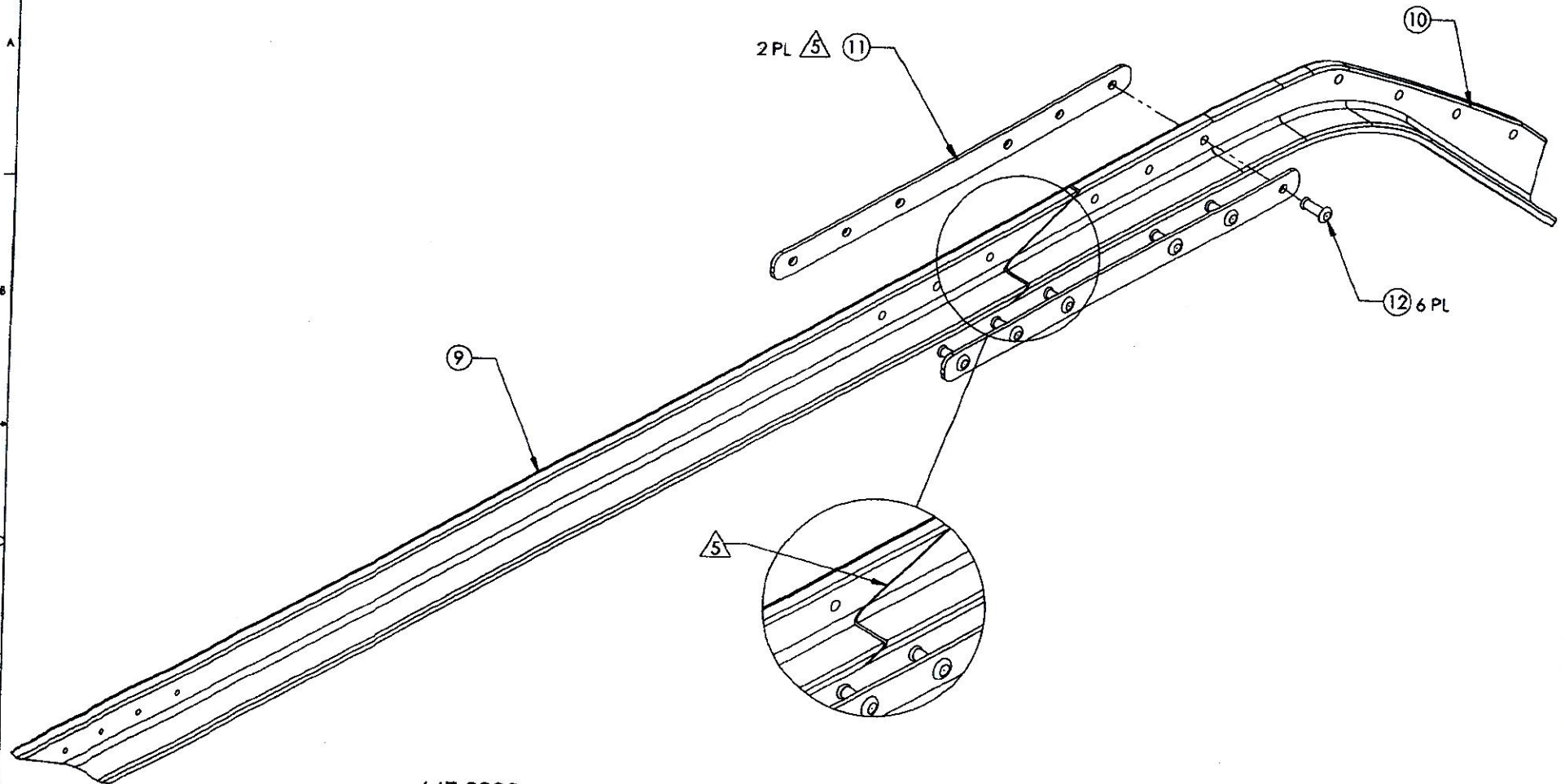
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SIZE B	CAGE CODE 07M26	DWG. NO. 647.3900
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SCALE NONE	SHEET 6 OF 12
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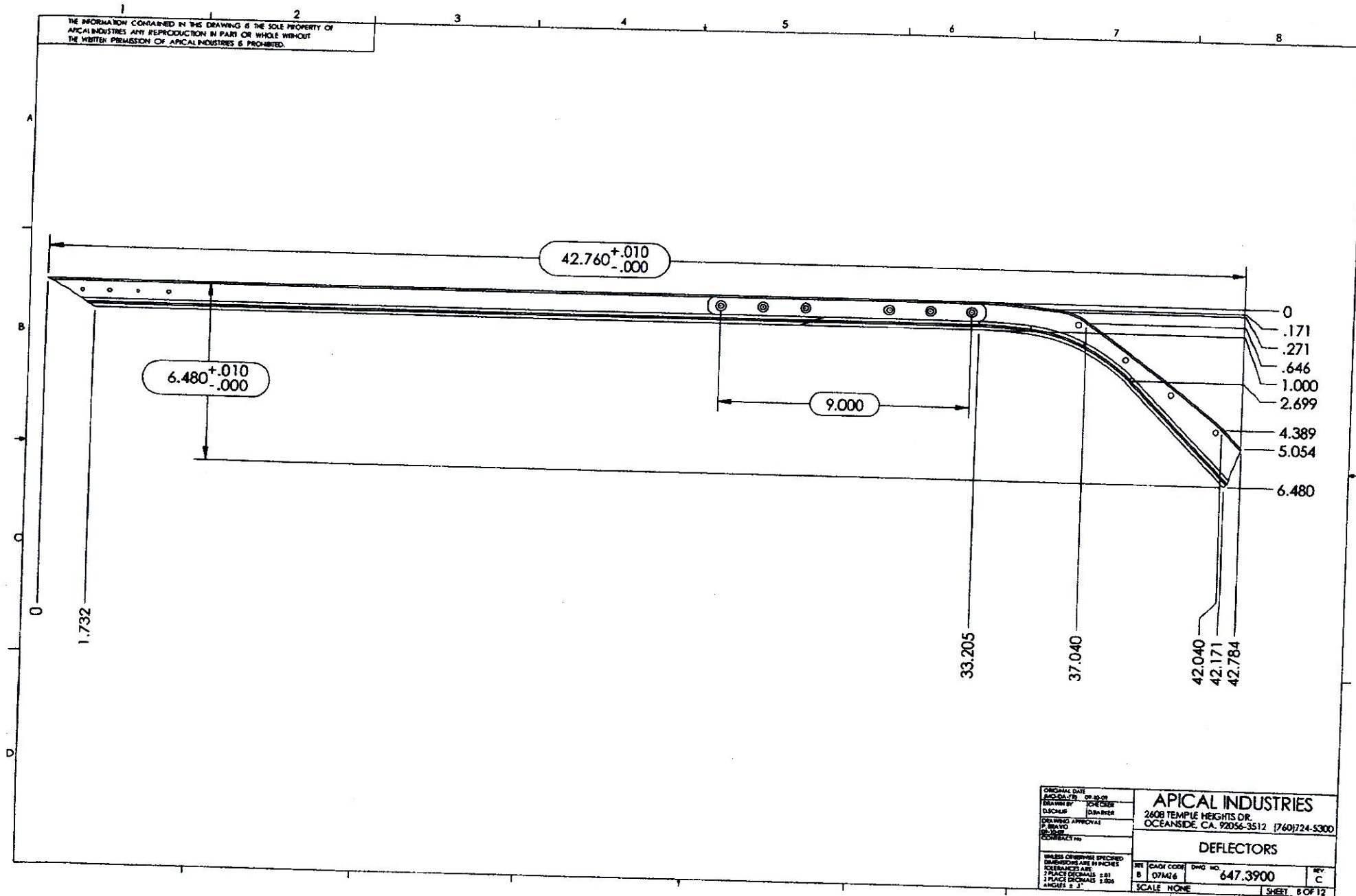
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647.3903

ORIGINAL DATE 01-10-01		APICAL INDUSTRIES	
DESIGN BY D. SCHUB		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BALVO		DEFLECTORS	
CONTRACT NO.		DWG. NO. 647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. B	REV. C
SCALE NONE		SHEET 7 OF 12	

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647.3915

AM

AR

AR

AN

$\phi .192$

$\phi .116$

0
.375

2.532

4.032

5.532

DETAIL AM

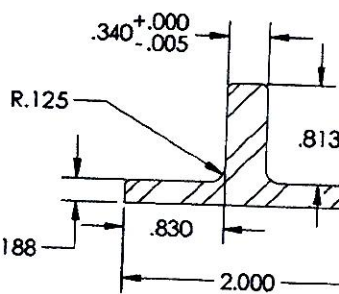
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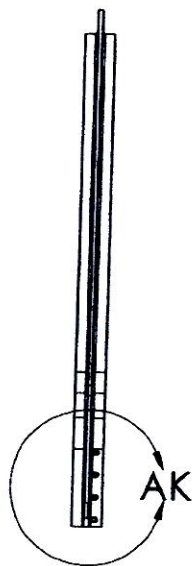


SECTION AR-AR

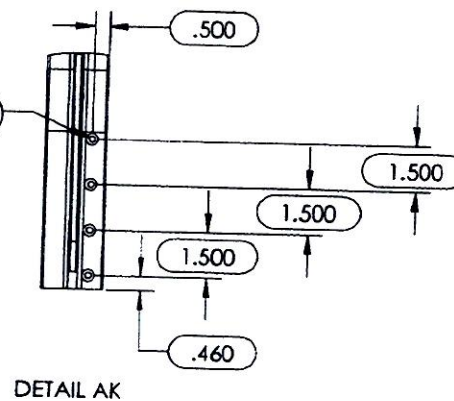
DETAIL AN

ORIGINAL DATE 8/20/84		APICAL INDUSTRIES	
DRAWN BY D. SCHER		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY D. SCHER		DEFLECTORS	
DRAWING APPROVAL P. BIRNBOIM		SHEET B	REV. C
CONTRACT NO.		CAGE CODE 07M26	QWS. NO. 647.3900
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SCALE NONE	SHEET 9 OF 12

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THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



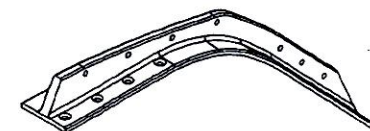
4X $\phi .196 \pm .010$ THRU ALL
✓ $\phi .385 \pm .020 \times 100^\circ \pm 1.000^\circ$



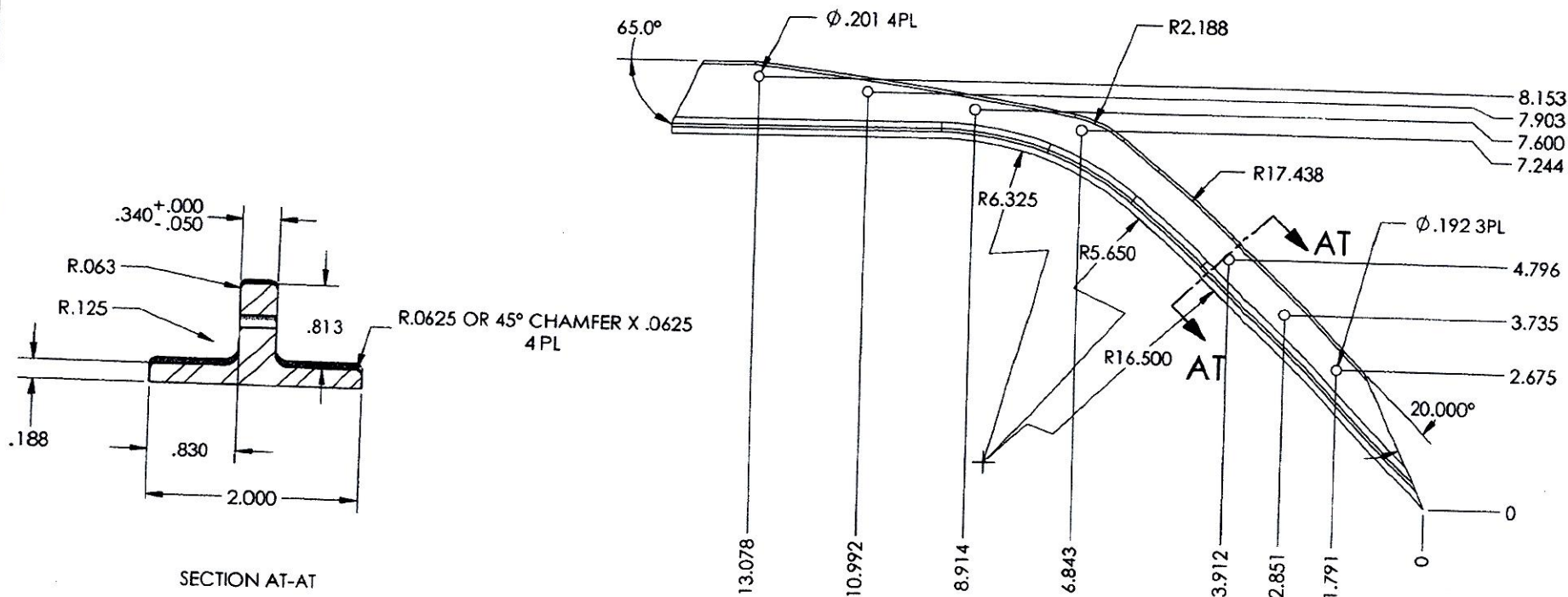
647.3915

ORIGINAL DATE 1/10/04-181 09:10:09		APICAL INDUSTRIES	
DRAWN BY ELISCHUP		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS $\pm .01$ 5 PLACE DECIMALS $\pm .0005$ ANGLES $\pm .5^\circ$		REV B	REV C
PAGE CODE 07M26		DWG. NO. 647.3900	
SCALE NONE		SHEET 10 OF 12	

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